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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,613	08/07/2003	Peter A. Krauss	010408.52554US	9614

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EXAMINER

CRIBBS, MALCOLM D

ART UNIT	PAPER NUMBER
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2115

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/635,613	Applicant(s) KRAUSS, PETER A.	
	Examiner Malcolm D. Cribbs	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-16 and 21-30 is/are rejected.
- 7) ☒ Claim(s) 17-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-11 are cancelled.

5 **Claims 12-30 are presented for examination.**

Claim Rejections - 35 USC § 101

23. An apparatus for data processing while using compressed data comprising:
- 10 a first data memory;
- a first volatile working memory;
- a second data memory; and
- a second volatile working memory;
- wherein said first data memory is used to store a non-compressed boot program
- 15 and said first volatile working memory being used to hold a copy of said boot program.

To satisfy section 101 requirements, the claim must be for a practical application of the § 101 judicial exceptions, which can be identified by following two tests:

1. The claimed invention “transforms” an article or physical object to a different
- 20 state or thing.
2. The claimed invention otherwise produces a useful, concrete and tangible
- result.

As to point 1, the apparatus comprises a first data memory and first volatile working memory holding a non-compressed boot program. But the first data memory and the first volatile data memory are not statutory by itself because it does not
5 transform an article or physical object to a different state or thing.

As to point 2, the apparatus comprises a first data memory and first volatile working memory holding a non-compressed boot program. But the first data memory and the first volatile data memory are not statutory by itself because it does not produce
10 a useful, concrete and tangible result by itself.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

15 A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the
20 applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Betz et
25 al [Publication No. US 2003/0046359].

As per claims 21-22, Betz discloses the claimed invention comprising:

a data structure stored in said computer-readable memory, said data structure including information used by said boot program and including:

a plurality of data memory fields for storing an application program in compressed form [Page 2-3; paragraph [0027], flash memory 185 and compressed programs 186; Page 3, paragraph [0036]]; and

a plurality of volatile working memory fields for receiving a copy of said application program in uncompressed form [Page 3; paragraph [0027 and 0036], decompressed programs are stored in SRAM 175];

wherein said boot program starts said application program [Page 3; paragraph [0036], step 406 the boot program is used to retrieve and decompress one or more programs stored on the FLASH: the examiner would like to note that a description of a computer-readable memory do not exist within the specification of the application].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-20, and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wadsworth et al [Patent No. US 5,701,492] in view of Toft [Publication No. US 2002/0138592].

As per claim 12, Wadsworth teaches the invention comprising:

loading a non-compressed boot program from a first data memory into a first
volatile working memory [Col 8 lines 62-63; wherein the boot block [boot program] is
5 copied from flash EPROM [first data memory] to DRAM [first volatile working memory]];
and
executing said boot program [Col 8 lines 66-67].

Wadsworth discloses a method of flashing of EPROM on a device by which new
10 versions of software or firmware may be downloaded to the EPROM; wherein
Wadsworth's flash EPROM includes a boot region [first data memory] containing boot
blocks and a file region [second data memory] containing executables [applications]
[Col.2 lines 39-61]. Wadsworth also includes a RAM to which the boot code and
executables are stored in different sectors thus representing a first volatile memory
15 containing boot code and a second volatile memory containing executable. Wadsworth
however does not disclose a method of operating the device while using compressed
data.

Toft discloses another method of downloading software or firmware to a flash
20 memory. Toft teaches, after downloading the software, the boot code decompresses
the software to RAM 130 and the boot code then executes the application thus the
application is decompressed and copied to RAM and executed by the boot program

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[0023]. Toft has the added benefit of allowing the user to select from a plurality of software or firmware programs using a simplified method [Page 1, paragraphs [0005] and [0008]].

5 It would have been obvious to one of ordinary skill in the art to combine the method of downloading software to EPROM method of Wadsworth with the various downloadable software programs discussed by Toft, as it would allow a great of flexibility to a user in choosing a specific software program among a plurality of programs and applications using a simplified method of selection menus [as discussed
10 by Toft above].

As per claim 13, it would have been obvious to one of ordinary skill in the art to include a start process control device, which is a means to start the loading of the boot program wherein without the means the boot program would not load and start the
15 execution of the application programs.

As per claim 14, Wadsworth teaches the claimed invention of memory as discussed above [Col 2 lines 39-61].

20 **As per claims 15-16**, it would have been obvious to one of ordinary skill in the art to include an interface device to access the first and/or second memory, wherein

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there must exist a mean to access the memory and to begin the transfer between the two memories.

Claims 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As per claims 23-30, it is directed to an apparatus to implement the method of steps as set forth in claims 12-20. Therefore, it is rejected on the same basis as set forth hereinabove.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malcolm D. Cribbs whose telephone number is 571-272-5689. The examiner can normally be reached on M-F 8AM-430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- 5 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Malcolm D Cribbs
Examiner
Art Unit 2115

February 21, 2007
MC



CHUN CAO
PRIMARY EXAMINER